

INTERNATIONAL SEARCH REPORT

International Application No
PCT/JP2004/016179

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01J37/32 H03H7/40

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H01J H03H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 902 457 A (ENI TECHNOLOGIES, INC) 17 March 1999 (1999-03-17) abstract paragraphs '0001!, '0002!, '0008! paragraphs '0011!, '0014! paragraph '0016! paragraphs '0025!, '0026!; figures 1,2	1-13
A	US 6 259 334 B1 (HOWALD ARTHUR M) 10 July 2001 (2001-07-10) abstract column 4, lines 40-43 column 5, lines 3-8,23-26 column 7, lines 16-55; figure 5 column 8, line 9 - line 30; figure 6 ----- -/--	1-3,5

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

27 April 2005

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax (+31-70) 340-3016

Authorized officer

Hofmann, K

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 2001/004729 A1 (METZGER DONALD M ET AL) 21 June 2001 (2001-06-21) abstract paragraphs '0005!, '0007! - '0012!; figures 1-3 paragraph '0038! paragraph '0052!</p> <p style="text-align: center;">-----</p>	1-6,8,9, 12,13
A	<p>US 2003/128042 A1 (VAN HORN MARK T ET AL) 10 July 2003 (2003-07-10) paragraph '0023!</p> <p style="text-align: center;">-----</p>	1-6,8,9, 12,13
A	<p>US 2003/178140 A1 (HANAZAKI MINORU ET AL) 25 September 2003 (2003-09-25) paragraph '0066! - paragraph '0071!; figure 1 paragraph '0162! - paragraph '0166!; figure 9 paragraph '0173!; figure 10 paragraph '0177! - paragraph '0182!; figure 11</p> <p style="text-align: center;">-----</p>	1-13
A	<p>US 6 424 232 B1 (MAVRETIC ANTON ET AL) 23 July 2002 (2002-07-23) column 4, lines 17-30; figures 2,3 column 6, line 61 - column 7, line 6 column 7, line 30 - line 50; figure 6</p> <p style="text-align: center;">-----</p>	1-13

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Information on patent family members

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